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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,944	12/29/2003	Neil Keegstra	1122-9	7886

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EXAMINER

BERGIN, JAMES S

ART UNIT PAPER NUMBER

3641

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,944

Applicant(s)

KEEGSTRA ET AL.

Examiner

James S. Bergin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/25/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 and 2, drawn to a close range spherical projectile comprising radially extending resilient filaments, the projectile for firing from the bore of a weapon, the filament of the projectile being compressed within the bore, classified in class 10, subclass 501.
 - II. Claims 3-6, drawn to a non-lethal shotgun round, classified in class 102, subclass 439.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the projectile of claims 1 and 2 is not required to be encased in a shotgun shell and can be fired directly from the bore of a weapon such as pneumatic cannon. The subcombination of claims 3-6 has separate utility such as a cartridge for cleaning the bore of a weapon.
3. Because these inventions are distinct for the reasons given above, the search required for Group I is substantially divergent from that required for Group II, and the

inventions have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Salvatore J. Abbruzzese on 8/2/2005 a provisional election was made with traverse to prosecute the invention of II, claims 3-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1 and 2 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment wherein the hull carries a plurality of projectiles, as claimed in claim 6, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 6 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an integrally formed core cover 44 that encloses the projectile core 42 (see paragraph [0016] of the specification), does not reasonably provide enablement for an embodiment in which the projectile core and the cover comprise an integrally formed projectile. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims, namely an integrally formed projectile.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 3-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, lines 8, 9, it is unclear how the "*diameter*"...of the projectile...can be "*greater than the inner diameter of the tubular hull*" while the projectile is encased within the hull.

In claim 5, line 2, the term "fine" is a relative term which renders the claim indefinite. The term "fine" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specification does not inform us of the dimensions of the filaments 46 or the meaning of "fine" in this context.

Also, in claim 5, line 3, the term "hedgehog-like" is indefinite because the metes and bounds of this limitation cannot readily be ascertained. Is the "hedgehog-like" shape intended to describe a defensively postured "rolled up" hedgehog or to describe the shape of a relaxed "unrolled" hedgehog?

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenlees (US 3,952,662 A).

Regarding claim 3 and in as much as the claims can be understood because of the indefiniteness discussed above, Greenlees discloses a non-lethal shot gun round comprising: hull 14 (fig. 2); forward end 18; base end 19; propellant 20; wadding 22; a projectile 26 that is generally spherical and that comprises a central solid spherical core 28 (figs 2 and 4; col. 2, lines 34-68) and a plurality of uniformly radially extending resilient filaments 30 (col. 2, line 62 – col. 3, line 15) that define an outer diameter of the projectile 26, the diameter being greater than the inner diameter of the hull (fig. 6 and col. 4, lines 20-26). The resilient filaments 30 of projectile 26 are inherently compressed to some degree, while the projectile is positioned within the hull 14 (fig. 2).

Regarding claim 4, the projectile 26 of Greenlees is integrally formed of a non-metallic material (col. 2, lines 56-69; figs. 2, 4, 6).

Regarding claim 5, the filaments 30 of the Greenlees projectile 26 are fine, floppy, elastic rod-like elements which uniformly radiate from the core 28 to form an essentially spherical body (col. 2, lines 56-58), the spherical body considered to be

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hedgehog-like in the sense that it comprises circumferentially disposed extended spine-like filaments 30.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Greenlees (US 3,952,662 A) in view of either Vassel et al. (US 6,546,874 B2) or EP 103,509 A1 (Lefebvre).

In as much as the claims can be understood because of the indefiniteness discussed above, Greenlees discloses a non-lethal shotgun round as discussed above. However, Greenlees does not specifically disclose that the hull carries a plurality of projectiles.

Vassel et al. teach that it was well known in the art to provide a plurality of projectiles in the hull of a non-lethal shotgun round (fig. 39B), the plurality of projectiles inherently increasing the hit probability.

Lefebvre teaches a plurality of projectiles in the hull of a shotgun round being well known in the non-lethal ammunition art and also inherently increasing the hit probability (fig. 2 and the attached English translation of the abstract).

In view of the teachings of either Vasel et al. or Lefebvre, it would have been obvious to create an embodiment of the Greenlees shell that had a plurality of the Greenlees projectiles therein, such a plurality of projectiles increasing the hit probability.

15. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 103,509 A1 (Lefebvre) in view of Chen (US 4,962,926 A).

In as much as the claims can be understood because of the indefiniteness discussed above, Lefebvre teaches non-lethal shotgun shells (fig. 1 & 2) comprising hull 1, base 2, propellant 4, wad 5, and a projectile or plurality of projectiles 8 positioned in the hull 1. Lefebvre's non-lethal projectile(s) 8 is formed of a solid rubber ball and appears in figure 1 to integrally formed. Lefebvre's ammunition is intended to be used for either self-defense, by security personnel or by caretaker teams (see the attached English translation of the abstract).

Lefebvre does not disclose that the non-lethal projectile comprises a plurality of radially extending resilient filaments defining an outer diameter of the projectile.

Chen discloses a projectile 10 (figs. 1, 2) comprising a spherical member having a central solid spherical core 16, a core holder 14 integrally formed with a plurality of uniformly radially extending non-metallic resilient filaments 12 defining an outer diameter of the projectile (col. 2, lines 15-22). Chen teaches that the filaments 12 provide the projectile 10 with a good shock absorbing effect at impact with a surface, which prevents the projectile from bouncing off the impacted surface, the filaments 12 absorbing much of the kinetic energy at the impact with the surface, which in Chen's patent is disclosed as the hand of a catcher (col. 2, lines 42-52).

In view of Chen's teaching, it would have been obvious to one of ordinary skill in the art at the time that the invention was made, to integrally form Lefebvre's projectile(s) with a plurality of uniformly radially extending, non-metallic resilient filaments, so as to absorb much of the kinetic energy at impact with a targeted individual. The filaments of Lefebvre's projectile(s), thus modified, would inherently be compressed to some degree, while the projectile was positioned within the hull 1.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lahr (US 3,067,680); Adelman (US 5,450,795 A); Carbone (US 5,361,700 A); Dubocage et al. (US 6,295,933 B1); Ditto et al. (US 3,938,272 A); Lemelson et al. (US 3,927,881 A); Huang (US 5,344,155 A); Bice et al. (US 2002/0129725 A1); Ratliff (US 5,845,629 A); and Blasé (US 4,846,750 A) .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

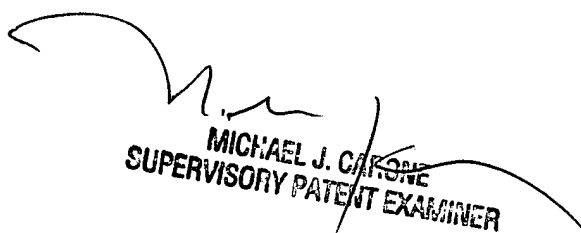
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James S. Bergin



MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER